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RESTON, V			ART UNIT	PAPER NUMBER	
,			3653		

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/630,940	HANSON ET AL.				
		Examiner	Art Unit				
		Mark Hageman	3653				
	The MAILING DATE of this communication		vith the correspondence add	Iress			
Period fo	or Reply						
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by sireply received by the Office later than three months after the need patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUN R 1.136(a). In no event, however, may a n. eriod will apply and will expire SIX (6) MO tatute, cause the application to become A	IICATION. a reply be timely filed DNTHS from the mailing date of this con ABANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 0	7 June 2006					
,	This action is FINAL . 2b)⊠ This action is non-final.						
3)	tters, prosecution as to the	merits is					
,—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
·		tion					
	Claim(s) <u>1-23</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.						
	□ Claim(s) is/are allowed.						
·	6) Claim(s) 1-23 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
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Annlicati	on Papers						
	•	-!					
·	The specification is objected to by the Exan		hy the Everniner				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the co		• •	R 1 121(d)			
11)[The oath or declaration is objected to by the			• •			
Priority u	ınder 35 U.S.C. § 119						
12)	Acknowledgment is made of a claim for fore	eian priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. \square Copies of the certified copies of the \square	priority documents have bee	n received in this National S	Stage			
	application from the International Bu		•				
* S	See the attached detailed Office action for a	list of the certified copies no	t received.				
Attachmen	t(s)						
1) Notic	e of References Cited (PTO-892)	4) Interview	Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08)		(s)/Mail Date Informal Patent Application				
	r No(s)/Mail Date <u>6-7-2006</u> .	6) 🔲 Other:	• •				

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 6 recites the limitation "the assigned output group" line 2-3. There is insufficient antecedent basis for this limitation in the claim. In claim 1 "assigned output groups" are mentioned but the singular group does not appear.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Leo et al., referred to as the reference, in view of US 2002/0104782 to DeWitt et al. The reference discloses a plurality of input feeding devices (F₁, F₂) each randomly receiving product from a stream of product; a plurality of output groups (W_a, W_b) each having a plurality of output bins; and a control system having a mode (Fig. 1a) which constrains the input feeding devices to (i) feeding non-rejected product to output bins of

assigned output groups of the plurality of output groups associated with a corresponding one of the plurality of input feeding devices (col 3, lines 10+; col 5, lines 10+). De Leo does not disclose (ii) feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders. De Witt discloses (ii) feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders (460) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

4. With regards to claim 2, DeWitt further discloses each of the plurality of input feeding devices (460) directs the rejected product from the stream of product to the at least one output bin (250) in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error (para 105), for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of

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applicant's invention to have modified De Leo to include, each of the plurality of input feeding devices (460) directs the rejected product from the stream of product to the at least one output bin (250) in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 5. With regards to claim 3, the reference further discloses a number of the plurality of input feeding devices equals a number of the plurality of output groups (col. 3, lines 10+; col. 5, lines 10+).
- 6. With regards to claim 4, DeWitt further discloses the at least one output bin is a single reject output bin (250).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, the at least one output bin is a single reject output bin (250), as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

7. With regards to claim 5, the combination of references further inherently discloses the single reject output bin increases a capacity of processing points for sequencing the product during a second pass phase in the plurality of output groups. A reject bin inherently increases the capacity of the apparatus, as undeliverable mail is removed from the system, thus freeing up capacity.

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8. With regards to claim 6, DeWitt further discloses the single reject output bin is provided in a separate output group from the plurality of output groups (para 98 lines 13-14). The reject bin (250) is a separate entity from the stacker (300) and therefore the reject bin is inherently in a separate output group.

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It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, the single reject output bin is provided in a separate output group from the plurality of output groups, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 9. With regards to claim 7, the reference further discloses the control system assigns each input feeding 4 device to a respective one of the assigned output groups of the plurality of output group for feeding the non-rejected product during a second pass phase (Fig. 1b; col. 3, lines 10+; col. 5, lines 10+).
- 10. With regards to claim 8, the reference further discloses the control system constrains each input feeding device to the at least one output bin for feeding the rejected product during the second pass phase (col. 3, lines 10+; col. 5, lines 10+).
- 11. With regards to claim 9, the reference further discloses the control system assigns each of the assigned output groups to a designated number of routes (col. 3, lines 10+; col. 5, lines 10+).
- 12. With regards to claim 10, the reference further discloses the plurality of input feeding devices is at least two input feeding devices (col. 3, lines 10+; col. 5, lines 10+).

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13. With regards to claim 11, the reference further discloses the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices (col. 3, lines 10+; col. 5, lines 10+).

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- 14. With regards to claim 12, the reference further discloses the control system provides the plurality of input feeding devices access to all of the plurality of output groups during a first pass phase of sorting the products (col. 3, lines 10+; col. 5, lines 10+).
- 15. With regards to claim 13, the reference further discloses the plurality of input feeding devices is equal to a number of the plurality of output groups (col. 3, lines 10+; col. 5, lines 10+).
- 16. With regards to claim 14, the reference further discloses the product is mail pieces (col. 3, lines 10+; col. 5, lines 10+).
- 17. With regards to claim 15, the reference further discloses providing a plurality of product from a stream of product to any of a plurality of input devices. feeding, in a first pass phase, each product of the plurality of product to output bins based on a code associated with each product of the plurality of product; assigning each input device of the plurality of input devices to a specific output group of the plurality of output groups for a second pass phase; feeding, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each input device which is feeding the non-rejected product (col. 3, lines 10+; col. 5, lines 10+). De Leo does not disclose feeding rejected product of the plurality of product to an output bin common and accessible to any of the input devices. DeWitt discloses

feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices (260 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

18. With regards to claim 16, DeWitt further discloses the rejected product is based on one of a misreading or non-reading of a code associated with the rejected product and an operator error (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, the rejected product is based on one of a misreading or non-reading of a code associated with the rejected product and an operator error, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

19. With regards to claim 17, DeWitt further discloses the rejected products are fed by each input device of the plurality of input devices (460) to the commonly accessible output bin (250 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

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It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, the rejected products are fed by each input device of the plurality of input devices (460) to the commonly accessible output bin, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

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- 20. With regards to claim 18, the reference further discloses the step of determining whether the product is going through a first pass phase or a second pass phase and adjusting a control system between a first mode of operation and a second mode of operation, respectively (col. 3, lines 10+; col. 5, lines 10+).
- 21. With regards to claim 19, DeWitt further discloses the commonly accessible output bin (250) is one of the output bins (250, 300) of the specific output group and the any of the input devices are all of the input devices for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, the commonly accessible output bin (250) is one of the output bins (250, 300) of the specific output group and the any of the input devices are all of the input devices, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

22. With regards to claim 20, the reference further discloses the product is mail pieces (col. 3, lines 10+; col. 5, lines 10+).

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23. With regards to claim 21, the reference further discloses means for providing a plurality of product from a stream of product; means for feeding each product of the plurality of product to output bins based on a code in a first pass phase and second pass phase; means for assigning each feeding means to a specific output group of the plurality of output groups for the second pass phase; means for constraining, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each feeding means which is feeding the non-rejected product (col. 3, lines 10+; col. 5, lines 10+). De Leo does not disclose means for permitting rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. DeWitt discloses disclose means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

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It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

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24. With regards to claim 22, the reference further discloses at least the means for constraining and the means for permitting is a control system operable in a first mode of operation and a second mode of operation (col. 3, lines 10+; col. 5, lines 10+).

- 25. With regards to claim 23, the reference further discloses the product is mail pieces (col. 3, lines 10+; col. 5, lines 10+).
- 26. Claims 1 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walach, referred to below as the reference, in view of US 2002/0104782 to DeWitt et al. The reference discloses a plurality of input feeding devices (P) each randomly receiving product from a stream of product; a plurality of output groups (N) each having a plurality of output bins; and a control system having a mode (120) which constrains the input feeding devices to (i) feeding non-rejected product to output bins of assigned output groups of the plurality of output groups associated with a corresponding one of the plurality of input feeding devices (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+). Walach does not disclose (ii) feeding rejected product to at least one output bin of the plurality of output bins in a single group accessible to any of the plurality of input feeders. De Witt discloses (ii) feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to any of the plurality of input feeders (460) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, feeding rejected product to at least one output bin (250) of the plurality of output bins in a single group accessible to

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any of the plurality of input feeders, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

27. With regards to claim 2, DeWitt further discloses each of the plurality of input feeding devices (460) directs the rejected product from the stream of product to the at least one output bin (250) in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error (para 105), for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, each of the plurality of input feeding devices (460) directs the rejected product from the stream of product to the at least one output bin (250) in the single group based on at least one of misreading or non-reading of a code associated with the rejected product and an operator or machine error, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 28. With regards to claim 3, the reference further discloses a number of the plurality of input feeding devices equals a number of the plurality of output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 29. With regards to claim 4, DeWitt further discloses the at least one output bin is a single reject output bin (250).

It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to have modified Walach to include, the at least one output bin is a single reject output bin (250), as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 30. With regards to claim 5, the combination of references further inherently discloses the single reject output bin increases a capacity of processing points for sequencing the product during a second pass phase in the plurality of output groups. A reject bin inherently increases the capacity of the apparatus, as undeliverable mail is removed from the system, thus freeing up capacity.
- 31. With regards to claim 6, DeWitt further discloses the single reject output bin is provided in a separate output group from the plurality of output groups (para 98 lines 13-14). The reject bin (250) is a separate entity from the stacker (300) and therefore the reject bin is inherently in a separate output group.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, the single reject output bin is provided in a separate output group from the plurality of output groups, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

32. With regards to claim 7, the reference further discloses the control system assigns each input feeding device to a respective one of the assigned output groups of the plurality of output group for feeding the non-rejected product during a second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

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33. With regards to claim 8, the reference further discloses the control system constrains each input feeding device to the at least one output bin for feeding the rejected product during the second pass phase (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

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- 34. With regards to claim 9, the reference further discloses the control system assigns each of the assigned output groups to a designated number of routes (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 35. With regards to claim 10, the reference further discloses the plurality of input feeding devices is at least two input feeding devices (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 36. With regards to claim 11, the reference further discloses the plurality of input feeding devices is four input feeding devices and the plurality of output groups is equal to a number of the plurality of input feeding devices (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 37. With regards to claim 12, the reference further discloses the control system provides the plurality of input feeding devices access to all of the plurality of output groups during a first pass phase of sorting the products (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 38. With regards to claim 13, the reference further discloses the plurality of input feeding devices is equal to a number of the plurality of output groups (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

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39. With regards to claim 14, the reference further discloses the product is mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

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40. With regards to claim 15, the reference further discloses providing a plurality of product from a stream of product to any of a plurality of input devices, feeding, in a first pass phase (120), each product of the plurality of product to output bins based on a code associated with each product of the plurality of product; assigning each input device of the plurality of input devices to a specific output group of the plurality of output groups for a second pass phase (130); feeding, in the second pass phase, non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each input device which is feeding the non-rejected product; and feeding, (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+). Walach does not disclose feeding rejected product of the plurality of product to an output bin common and accessible to any of the input devices. DeWitt discloses feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices (260 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, feeding rejected product of the plurality of product to an output bin (250) common and accessible to any of the input devices, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

41. With regards to claim 16, DeWitt further discloses the rejected product is based on one of a misreading or non-reading of a code associated with the rejected product and an operator error (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, the rejected product is based on one of a misreading or non-reading of a code associated with the rejected product and an operator error, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

42. With regards to claim 17, DeWitt further discloses the rejected products are fed by each input device of the plurality of input devices (460) to the commonly accessible output bin (250 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, the rejected products are fed by each input device of the plurality of input devices (460) to the commonly accessible output bin, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

43. With regards to claim 18, the reference further discloses the step of determining whether the product is going through a first pass phase (120) or a second pass phase (130) and adjusting a control system between a first mode of operation and a second mode of operation, respectively (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

44. With regards to claim 19, DeWitt further discloses the commonly accessible output bin (250) is one of the output bins (250, 300) of the specific output group and the any of the input devices are all of the input devices for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified Walach to include, the commonly accessible output bin (250) is one of the output bins (250, 300) of the specific output group and the any of the input devices are all of the input devices, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 45. With regards to claim 20, the reference further discloses the product is mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 46. With regards to claim 21, the reference further discloses means for providing a plurality of product from a stream of product; means for feeding each product of the plurality of product to output bins based on a code in a first pass phase (120) and second pass phase; means for assigning each feeding means to a specific output group of the plurality of output groups for the second pass phase; means for constraining, in the second pass phase (130), non-rejected product of the plurality of product to the output bins of the specific output group assigned to the each feeding means which is feeding the non-rejected product; and means for permitting, in the second pass phase (130 and col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+). Walach does not disclose

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means for permitting rejected product of the plurality of product to an output bin common and accessible to any of the feeding means. DeWitt discloses disclose means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means (460 and para 105) for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have modified De Leo to include, means for permitting rejected product of the plurality of product to an output bin (250) common and accessible to any of the feeding means, as taught by DeWitt, for the purpose of separating items which have been misread or partially read from those that have been properly processed (para 105).

- 47. With regards to claim 22, the reference further discloses at least the means for constraining and the means for permitting is a control system operable in a first mode of operation and a second mode of operation (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).
- 48. With regards to claim 23, the reference further discloses the product is mail pieces (col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+).

Response to Arguments

49. Applicant's arguments filed 6-7-2006 have been fully considered but they are not persuasive. Applicant states, "De Leo is completely silent as to output groups in the first pass phase." Examiner maintains that this is not true and that output groups are

inherent in De Leo during the first pass phase as in fig 1 and fig 2 it can be seen that some bins after the first pass that only contain "a" items and other bins only contain "b" items. This relationship is maintained after the second pass.

50. Regarding the Walach reference applicant states, "Walach does not teach or suggest a plurality of input feeding devices each randomly receiving products from a stream of product." Examiner maintains that Walach discloses, a plurality of input feeding devices (10) each randomly receiving products from a stream of product (c9 lines 33-35).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Hageman whose telephone number is (571) 272-3027. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCH

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